

ABSTRACT OF THE DISCLOSURE

A laminated composite material that can be used in particular to make sports articles, especially boots. A new basis material is disclosed for making articles of manufacture, in particular sports articles, which have drastic mechanical requirements, are very inexpensive and as lightweight as possible. According to the invention, the laminate has a sandwich structure made of a core inserted between two layers, wherein:

- the core and the two layers are composites;
- at least a portion of the fibers of the core are fibers whose mechanical strength is significantly lower than that of at least a portion of the fibers of one and/or the other layer.

Preferably, the total thickness e of the laminate is less than or equal to 3 mm. The layers are sheets of carbon fabric embedded in an epoxy resin, and the core is, for example, a non-woven of polyamide micro-fibers having a thickness equal to 0.32 mm. The invention also relates to the manufacture of this laminate and its use for manufacturing sports articles, or for obtaining a composite laminate layer. The invention also relates to articles manufactured from this composite micro-sandwich.